numerous on the posterior surface than the anterior. Palpal tibia (Fig. K., L.) with long slender setac more numerous on posterior surface than anterior surface, with heavy pointed claw. Tarsus inserted midway of tibia. Tibial setac becoming smooth distal to tarsus insertion.

Male.—Unknown.

This description was based on the female holotype (dissected) and seven undissected paratypes from Mt. Mitchell, North Carolina. The specimens were collected May 15, 1959 on the bark of Fraser fir trees where they were feeding on the balsam woolly aphid, *Chermes piceae* Ratz. Collectors, Robert Davis and Gene D. Amman.

The holotype and two paratypes will be deposited in the U. S. National Museum. Five paratypes will be placed in the collection

of the University of Georgia.

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IXODES BAKERI, A NEW SPECIES OF TICK FROM NYASALAND

(ACARINA: IXODIDAE)

Don R. Arthur¹ and Carleton M. Clifford²

The new species of *Ixodes* here described was found among several lots of unidentified African ticks on loan from the Museum of Comparative Zoology, Harvard University, Cambridge, Mass. This species is named for Dr. Edward W. Baker, Acarologist in the Entomology Research Division, U.S. Department of Agriculture.

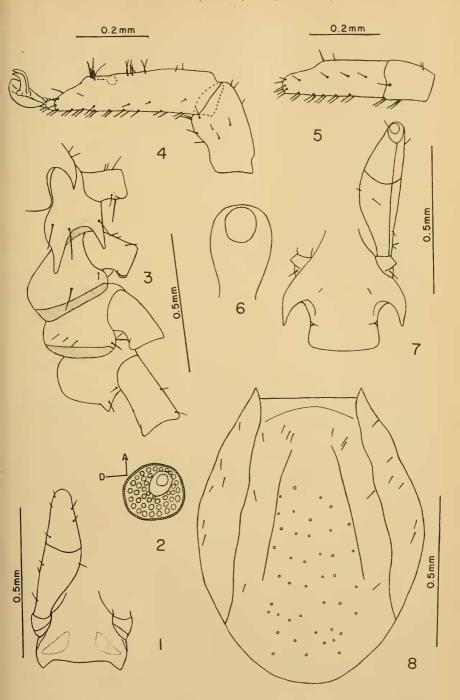
Ixodes bakeri, new species

(Figs. 1-8)

Holotype.—Female, from Otomys species, Nyika plateau, 7000 ft., Nyasaland. A. Loveridge leg. Deposited in the Museum of Compara-

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Ixodes bakeri, new species, female. Fig. 1, dorsal view of capitulum; fig. 2, spiracle; fig. 3, coxae 1-IX; fig. 4, tarsus I and metatarsus I; fig. 5, tarsus IV; fig. 6, anal groove; fig. 7, ventral view of capitulum; fig. 8, scutum.



tive Zoology, Harvard University, Cambridge, Mass., U.S.A.

Female,—Partially fed. Oval, widest about mid-length. Capitulum, sentum and legs yellow brown. Body with numerous fine pale hairs dorsally and ventrally.

Capitulum.—Length, tips of palpi to tips of cornua, 0.61 mm.: width of basis across cornua 0.31 mm. Basis capituli broad, lateral margins posterior to insertion of palpi short and convex, posterior margin almost straight; cornua strong, broad, tapered. Porose areas small, pyriform, slightly depressed and separated by an interval exceeding the length of one of them. Palpi long, rounded apically, broadest at distal third of segment 2. Palpal segment 1 a simple ring when seen dorsally, but produced into a spine-like process ventrally. Length of segment 2, 0.24 mm., segment 3, 0.21 mm. Ventrally, basis widest across auriculae; slightly constricted behind auriculae; surface smooth, almost flat, and straight posteriorly; transverse suture line lacking. Auriculae present as long, sharply pointed posteriorly directed projections. Hypostome damaged, but median and lateral teeth long and sharply pointed.

Scutum.—Length 0.99 mm., greatest width of 0.77 mm. just behind midlength. Shape as figured. Surface smooth shining. Scapulae of moderate length, pointed. Emargination broad, shallow. Cervical grooves as shallow depressions, divergent and extending beyond mid-length. Lateral carinae run close to, and parallel with, cervical grooves, but extend back to posterolateral margins. Punctations small, fairly widely and uniformly dispersed in the central field. Hairs sparse, but where they occur are fine and of moderate length; arranged as in the figure. Hairs on the alloscutum longer and thicker.

Legs.—Of moderate length and thickness. Coxae I-III with narrow syncoxae; coxa I with external and internal spurs long and of approximately equal length; coxae II and III both lack spurs, whilst coxa IV has a very short, broadly pointed external spur. Trochantal spurs short, very broad and rounded apically. Hairs on legs tend to be short.

Tarsi:—Tarsus I with dorsal surface converging slightly to Haller's organ, subapical hump moderate, tarsus IV with subapical hump less well defined; length of tarsus I, 0.47 mm., metatarsus I, 0.22 mm.; tarsus IV, 0.41 mm., metatarsus IV, 0.27 mm.

Genital orifice.—On level with coxae III.

Anal aperture.—Placed near posterior edge of body. Anal groove roughly horseshoe shaped.

Spiracular Plate:—Ovoid, macula anterior of center. Goblets large, not numerous. Dimensions in holotype, 0.18 x 0.17 mm.

RELATED SPECIES

This species has apparent affinities with *Lodes colasbelcouri* Arthur 1957, in the capitular features, in the form of the anal groove, in the scutal characters and in being a parasite of small rodents. Its sepa-

ration from *I. colasbelcouri* rests on the spurs of the coxae and of the trochanters. Thus in the species presently described the external and internal spurs on coxa I are long and almost equal in length; in *I. colasbelcouri* the external spur is very short and the internal spur is very short and the internal spur is spur of coxa IV is *colasbelcouri* is very long. Similarly the external spur of coxa IV is *colasbelcouri* is very long and pointed whilst in this species it is short and broad. The trochantal spurs on legs II-IV also, in *I. colasbelcouri*, are attenuated and sharp, but in *Ixodes bakeri* they are very short and broadly rounded.

Ixodes lunatus and *I. colasbelcouri* are, as far as we know, endemic in Madagascar and *I. bakeri* is the first species of this doubtless com-

plex of species to be found on the African mainland.

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